Read ESTET Data

INTRODUCTION

EnSight supports files written from ESTET (a commercial CFD solver). The ESTET format supports block structured meshes and is only available in binary format.

Reading data into EnSight is a two-step process. First, the appropriate files are selected. This step is largely the same regardless of the format of the data being read. Second, parts are constructed using an interface that is specific to the applicable data format. This article covers the second step for ESTET data. See **How To Read Data** for more information on selecting the appropriate files.

ESTET datasets consist of the following files. Note that the entry in the File Name column is only a suggestion – it typically does not matter to EnSight what the actual file name is.

File	File Name	Notes	Required?
Geometry	file	Contains coordinates and variables	required

BASIC OPERATION

After you have specified the appropriate data files with the File Selector (opened with File > Data (Reader)... as discussed in **How To Read Data**) and clicked Okay, the Data Part Loader (ESTET) dialog will open. You use this dialog to build the desired vector variables and parts. Before you build parts, you have the option of building vector variables from the set of available scalar variables. To build vector variables:

After you click Okay in the File Selection dialog, the ESTET Vector Builder dialog will open. To build vector variables, you select the desired X,Y,Z components (one at a time) from the Available Variables list and then click the corresponding "Set-?-Comp" button.

1. Select the name of the X component of the desired vector variable.

2. Click Set-X-Comp.

3. Perform steps 1 and 2 for the Y and Z components.

4. Enter a name for the new vector variable.

5. Click Build Vector.

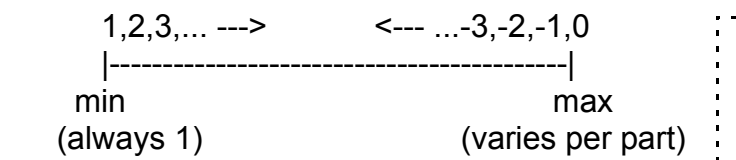**6. Build another vector variable or click Okay.**
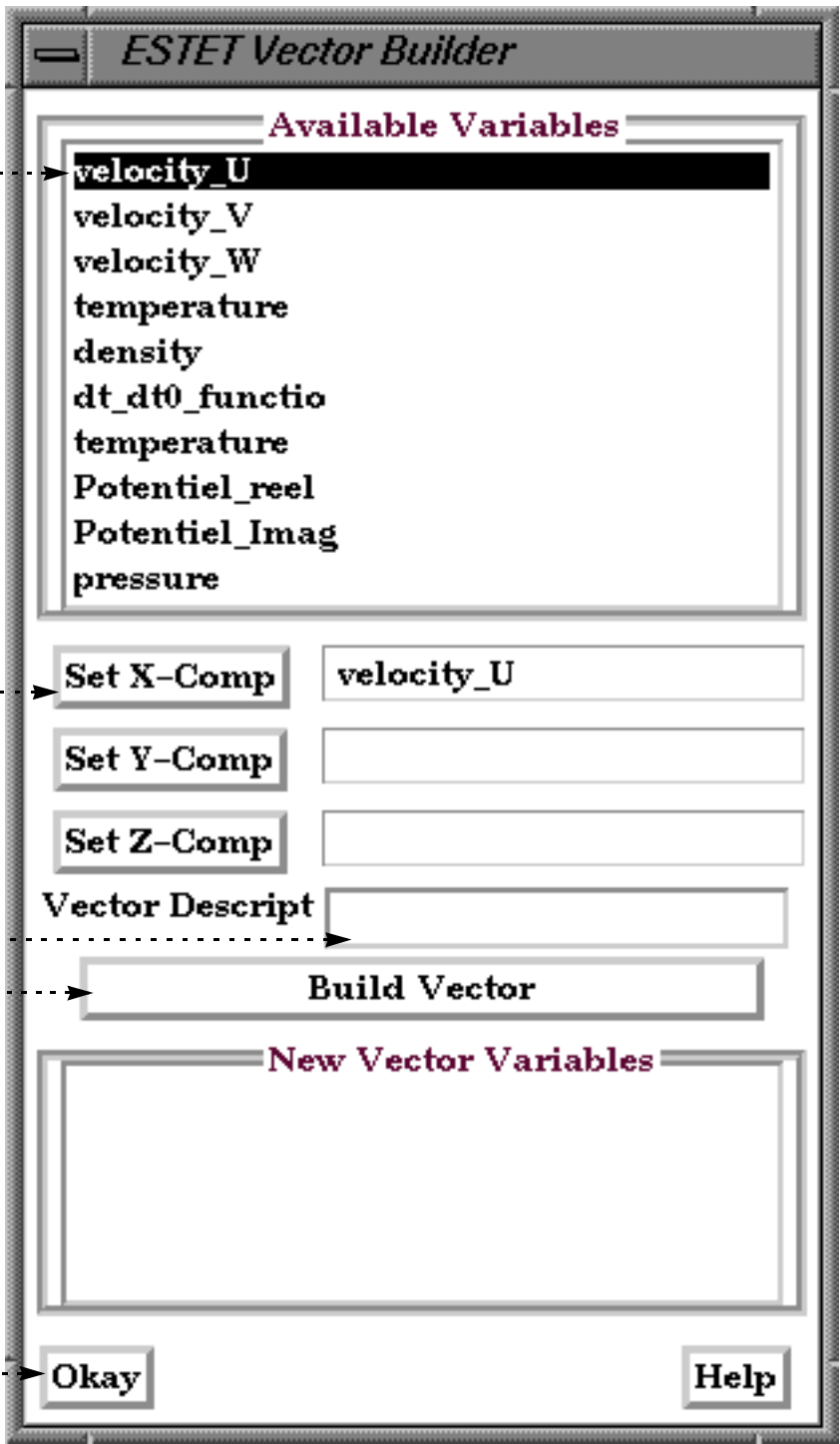
After you click Okay, the Data Part Loader (ESTET) opens. To build parts for the ESTET format data:

1. **If the Data Part Loader dialog is not open, select File > Data (Part Loader)...**

2. **You can select the domain from which to build the part: Inside, Outside, or All.**

3. **If desired, specify From, To, and Step IJK values for the part. The From and To values are inclusive.**

   Valid values in the From and To fields are numbers   advancing from 1(the min for each part), or numbers decreasing from 0(the max for each part):

```
    1,2,3,... --->          <--- ...-3,-2,-1,0
    |----------------------------------------|
   min                               max
   (always 1)               (varies per part)
```

   If you specify values that will be outside of the range of an individual part, the proper min or max values for the given part will be used.
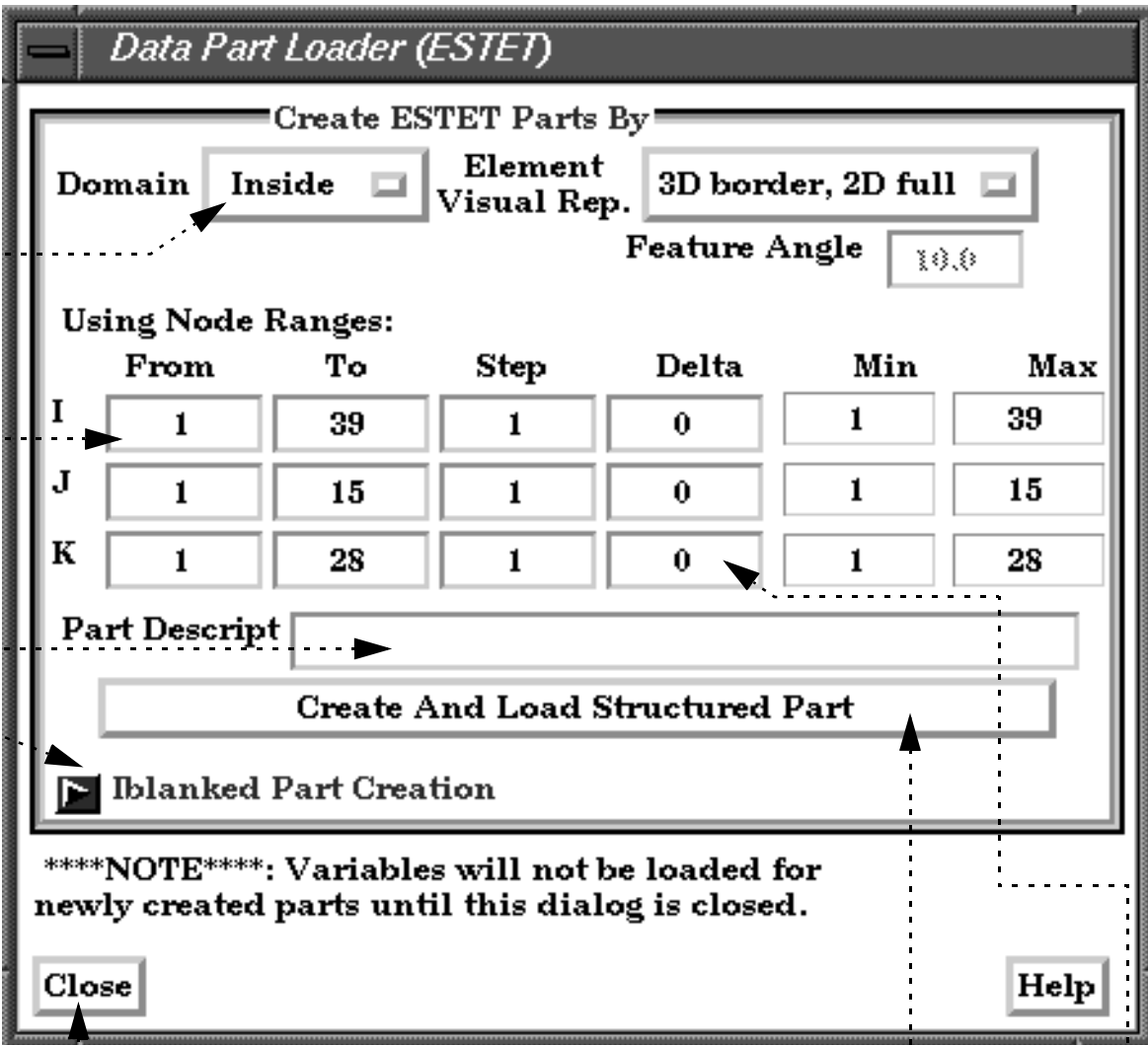
   The Min and Max values are for reference only.

5. **If desired, enter a name for the part (to use in the Main Parts list).**

6. **Click Create and Load Part.**

7. **Open this turndown section to create unstructured parts based on boundary Iblanking (such as symmetry) from any parts created above.**

8. **Click Close when done.**

4. **If you desire to extract multiple surfaces (at a constant delta) from the same zone, set one of the directions to the desired non-zero delta value.**

   This is a "blade row" kind of operation. Please note that this results in an unstructured part instead of a structured one.

Data Part Loader (ESTET)

Create ESTET Parts By

Domain: Inside   Element Visual Rep.: 3D border, 2D full   Feature Angle: 10.0

Using Node Ranges:

	From	To	Step	Delta	Min	Max
I	1	39	1	0	1	39
J	1	15	1	0	1	15
K	1	28	1	0	1	28

Part Descript

Create And Load Structured Part

Iblanked Part Creation

****NOTE****: Variables will not be loaded for newly created parts until this dialog is closed.

Close   Help

OTHER NOTES

You can reopen the Data Part Loader dialog at any time to build additional parts. Simply select File > Data Part Loader)... and build the desired parts as described above. You cannot, however, return to the ESTET Vector Builder dialog.

SEE ALSO

How To Read Data

User Manual: **ESTET Reader**